



RESEARCH NOTE NC-31

NORTH CENTRAL FOREST EXPERIMENT STATION, FOREST SERVICE—U.S. DEPARTMENT OF AGRICULTURE

Folwell Avenue, St. Paul, Minnesota 55101

**RIISING PULPWOOD PRICES STIMULATE
LARGEST LAKE STATES PULPWOOD HARVEST, 1966**

ABSTRACT. The 1966 Lake States pulpwood harvest climbed to $4\frac{1}{4}$ million cords, an 18 percent increase from 1965. Woods labor continued to be scarce, but a better logging season coupled with the higher prices provided the incentive for reaching the record harvest.

After several years of minor fluctuations, the 1966 Lake States pulpwood harvest climbed sharply to 4,280,000 cords, an 18-percent increase over 1965 (table 1 on back of page). Cutting increased with rising pulpwood prices in the region. Woods labor continued to be scarce; but a better logging season, coupled with higher prices and increased mechanization in logging, provided the incentive for reaching the record harvest. The greater demand for pulpwood resulted from additions to regional pulping capacities, high levels of economic activity throughout the country, and a growing population.

All three states shared the pulpwood production gains. Wisconsin led with a 23-percent advance over 1965; Minnesota and Michigan were each ahead by 15 percent.

Roundwood pulpwood cut in the region was 4.1 million cords, about 96 percent of the total and 600,000 cords above the 1965 cut. Approximately 400,000 more cords of aspen were cut than in 1965. Half of the additional aspen cords were harvested in Wisconsin where average delivered mill prices for rough and peeled aspen apparently have climbed about 13 percent and 27 percent, respectively, since 1963.¹ Cutting of Minnesota aspen was up almost 150,000 cords from 1965. Average Minnesota aspen pulpwood prices (f.o.b. cars) are more than one-fifth higher than in 1963 for both rough and peeled cords.² Hemlock cutting increased by more than one-

third; all of the gain occurred in Wisconsin. The delivered Wisconsin mill price of rough hemlock has risen about 14 percent since 1963.¹ The harvest of pine and miscellaneous hardwoods increased by 100,000 and 80,000 cords respectively. Most of the additional pine was cut in Minnesota. Wisconsin and Michigan shared equally the added harvest of hardwoods.

Not all species shared in the larger cut, however. Lake States loggers produced 17 percent less spruce pulpwood than in 1965; Minnesota accounted for all of the decline. Birch and tamarack production was down also.

Wood chips, slabs, and veneer cores used for pulping amounted to 4 percent of the total Lake States production. Local primary wood-using firms shipped 175,000 cords of such material to local and Central States pulp mills in 1966, an increase of 31,000 cords over 1965. However, less local softwood residues were used for pulping than in 1965.

Pulpwood receipts at Lake States mills in 1966 were approximately $4\frac{3}{4}$ million cords, $\frac{3}{4}$ million cords above 1965. Receipts were up 22 percent in Michigan, 18 percent in Wisconsin, and 16 percent in Minnesota. Lake States forests supplied 91 percent of the roundwood, Canada 7 percent, and western states 2 percent (table 2). A striking shift occurred in spruce procurement. Although the regional mills received 45,000 fewer cords of native spruce, purchases from Canada increased by 65,000 cords. As a result, 5 percent more spruce was consumed in regional mills than in 1965. Changes in receipts of other species closely paralleled their production changes in the Lake States.

¹ Based on data from *Wisconsin Forest Products Review*, University of Wisconsin Extension Service, July 1963 and April 1967.

² Based on data from *Minnesota Forest Products Marketing and Pricing Review*, Office of Iron Range Resources and Rehabilitation, 1963 and 1966.

Table 1. — *Production and imports of pulpwood, Lake States, 1966*
(In standard cords, unpeeled)

Species and destination	Production by states ^{1/}				Imports			
	Minnesota	Wisconsin	Michigan	Region	Other U. S. ^{2/}	Canada	Total imports	Total receipts
Aspen								
Minn.	577,874	4,000	-	581,874	-	5,585	5,585	587,459
Wis.	33,973	802,553	275,634	1,112,160	-	238	238	1,112,398
Mich.	-	3,166	500,837	504,003	255	21,565	21,820	525,823
Total	611,847	809,719	776,471	2,198,037	255	27,388	27,643	2,225,680
Balsam fir								
Minn.	59,601	-	-	59,601	-	139	139	59,740
Wis.	20,339	55,004	63,006	138,349	428	47	475	138,824
Mich.	-	-	24,747	24,747	-	19,322	19,322	44,069
Total	79,940	55,004	87,753	222,697	428	19,508	19,936	242,633
Birch, white								
Minn.	1,098	-	-	1,098	-	-	-	1,098
Wis.	21	39,302	4,640	43,963	-	-	-	43,963
Mich.	-	-	7,615	7,615	-	-	-	7,615
Total	1,119	39,302	12,255	52,676	-	-	-	52,676
Hemlock								
Minn.	-	-	-	-	-	-	-	-
Wis.	-	68,672	93,623	162,295	-	-	-	162,295
Mich.	-	-	5,302	5,302	-	-	-	5,302
Total	-	68,672	98,925	167,597	-	-	-	167,597
Pine								
Minn.	198,401	-	-	198,401	-	8,378	8,378	206,779
Wis.	56,746	215,383	107,650	379,779	91,783	1,279	93,062	472,841
Mich.	268	-	143,041	143,309	-	-	-	143,309
Total	255,415	215,383	250,691	721,489	91,783	9,657	101,440	822,929
Spruce								
Minn.	90,183	-	-	90,183	2,468	62,415	64,883	155,066
Wis.	71,974	17,458	53,164	142,596	3,783	154,205	157,988	300,584
Mich.	48	-	21,157	21,205	-	56,477	56,477	77,682
Exported ^{3/}	9,954	-	-	9,954	-	-	-	-
Total	172,159	17,458	74,321	263,938	6,251	273,097	279,348	533,332
Tamarack								
Minn.	231	-	-	231	-	-	-	231
Wis.	7,071	3,186	601	10,858	-	-	-	10,858
Mich.	-	-	-	-	-	-	-	-
Total	7,302	3,186	601	11,089	-	-	-	11,089
Misc. dense hwdws.								
Minn.	30,843	-	-	30,843	-	-	-	30,843
Wis.	48	234,465	35,591	270,104	-	-	-	270,104
Mich.	-	-	158,640	158,640	754	-	754	159,394
Exported ^{3/}	133	8,040	-	8,173	-	-	-	-
Total	31,024	242,505	194,231	467,760	754	-	754	460,341
Total roundwood								
Minn.	958,231	4,000	-	962,231	2,468	76,517	78,985	1,041,216
Wis.	190,172	1,436,023	633,909	2,260,104	95,994	155,769	251,763	2,511,867
Mich.	316	3,166	861,339	864,821	1,009	97,364	98,373	963,194
Exported ^{3/}	10,087	8,040	-	18,127	-	-	-	-
Total	1,158,806	1,451,229	1,495,248	4,105,283	99,471	329,650	429,121	4,516,277
Residues, softwood								
Minn.	-	-	-	-	-	-	-	-
Wis.	1,825	6,624	2,539	10,988	88,975	-	88,975	99,963
Mich.	-	-	-	-	-	-	-	-
Exported ^{3/}	-	5,069	1,693	6,762	-	-	-	-
Total	1,825	11,693	4,232	17,750	88,975	-	88,975	99,963
Residues, hardwood								
Minn.	11,637	8,451	1,353	21,441	-	-	-	21,441
Wis.	793	58,444	29,760	88,997	494	-	494	89,491
Mich.	-	-	40,046	40,046	1,190	-	1,190	41,236
Exported ^{3/}	768	5,997	-	6,765	-	-	-	-
Total	13,198	72,892	71,159	157,249	1,684	-	1,684	152,168
All wood material								
Minn.	969,868	12,451	1,353	983,672	2,468	76,517	78,985	1,062,657
Wis.	192,790	1,501,091	666,208	2,360,089	185,463	155,769	341,232	2,701,321
Mich.	316	3,166	901,385	904,867	2,199	97,364	99,563	1,004,430
Exported ^{3/}	10,855	19,106	1,693	31,654	-	-	-	-
Total	1,173,829	1,535,814	1,570,639	4,280,282	190,130	329,650	519,780	4,768,408

^{1/} Vertical columns of figures under box heading "Production by States" present the amount of pulpwood cut in each State.

^{2/} Mostly Western States.

^{3/} Pulpwood shipped to mills outside of Region.

Table 2. — *Geographic origin and destination of pulpwood received by Lake States mills, 1966*

Species	Percent of pulpwood originating from:					Percent of pulpwood received by mills in:		
	Minn.	Wis.	Mich.	Canada	Other U. S.	Minn.	Wis.	Mich.
Aspen	28	36	35	1	*	26	50	24
Balsam fir	33	23	36	8	*	25	57	18
Birch	2	75	23	—	—	2	83	15
Hemlock	—	41	59	—	—	—	97	3
Pine	31	26	31	1	11	25	58	17
Spruce	31	3	14	51	1	29	56	15
Tamarack	66	29	5	—	—	2	98	—
Misc. hardwoods <u>1/</u>	7	51	42	—	*	7	59	34
Residues	6	29	29	—	36	9	75	16
All wood material	24	32	33	7	4	22	57	21
Previous year (1965)	25	31	34	7	3	23	57	20

1/ Mostly dense hardwoods.

* Less than $\frac{1}{2}$ of one percent.